

IN THE CLAIMS:

- ✓ Please cancel claims 1 - 31 without prejudice. *already cancel*
- ✓ Please add the following claims:

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1 32. A method for creating and using a data structure in a memory for storing information for
2 controlling customer resources for network traffic delivery comprising:

3 entering a policy enforcement point (PEP) identifier corresponding to a policy
4 enforcement point in a first field of the data structure;

5 entering a group identifier corresponding to the group of endpoints in a second field of
6 the data structure in the memory, wherein the group of endpoints being associated with the PEP;

7 entering predetermined network utilization limit information for the group in a third field
8 of the data structure, wherein the data structure is stored in the memory;

9 receiving a message corresponding to a request for network resources for a data flow for
10 one endpoint of the group of endpoints;

11 accessing said data structure based on information contained within said message; and

12 responding to said message based on information contained within said data structure.

1 33. The method recited in claim 32, wherein entering predetermined network utilization limit
2 information for the group in a fourth field further comprises:

3 entering a limit for a number of flow request attempts by the group occurring during a
4 time period in a fourth field;

5 entering a limit for an amount of bandwidth currently in use by the group in a fifth field;

6 and

7 entering a limit for a number of flows currently active for the group in a sixth field,

8 wherein the limit for a number of flow request attempts.

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1 34. A method for creating and using a data structure in a memory for storing information for
2 controlling customer resources for network traffic delivery comprising:
3 entering a policy enforcement point (PEP) identifier corresponding to a PEP in a first
4 field of the data structure;
5 entering a group identifier corresponding to the group of endpoints in a second field of
6 the data structure in the memory wherein the group of endpoints being associated with the PEP;
7 entering network utilization level information for the group, the network utilization level
8 information corresponding to a current amount of network resource consumption by the group in
9 a third field of the data structure wherein the data structure is stored in the memory;
10 receiving a message corresponding to a request for network resources for a data flow for
11 one endpoint of the group of endpoints;
12 accessing said data structure based on information contained within said message; and
13 responding to said message based on information contained within said data structure.

1 35. The memory of claim 34 wherein entering network utilization level information for the
2 group further comprises:
3 entering a number of flow request attempts by the group occurring during a time period
4 in a fourth field of the data structure;
5 entering an amount of bandwidth currently in use by the group in a fifth field of the data
6 structure; and
7 entering a number of flows currently active for the group in a sixth field of the data
8 structure.

1 36. A system for storing and using information in a data structure for controlling customer
2 resources for network traffic delivery comprising:
3 storage means for storing a policy enforcement point (PEP) identifier corresponding to a
4 policy enforcement point in a first field of the data structure in the memory;
5 storage means for storing a plurality of endpoint identifiers corresponding to a group of
6 endpoints on a network in a second field of the data structure in the memory;
7 storage means for storing a group identifier corresponding to the group of endpoints in a
8 third field of the data structure in the memory, wherein the group of endpoints being associated
9 with the policy enforcement point (PEP);
10 storage means for storing predetermined network utilization limit information for the
11 group in a fourth field of the data structure in the memory;
12 receiving means for receiving a message corresponding to a request for network
13 resources for a data flow for one endpoint of the group of endpoints;
14 accessing means for accessing said data structure based on information contained within
15 said message; and
16 response means for responding to said message based on information contained within
17 said data structure.

1 37. The system recited in claim 36 wherein the storage means for storing predetermined
2 network utilization limit information further comprises:
3 storage means for storing a limit for a number of flow request attempts by the group
4 occurring during a time period in a fifth field;
5 storage means for storing a limit for an amount of bandwidth currently in use by the
6 group in a sixth field; and
7 storage means for storing a limit for a number of flows currently active for the group in a
8 seventh field wherein the limit for a number of flow request attempts.

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1 38. A system for storing and using information in a data structure for controlling customer
2 resources for network traffic delivery comprising:
3 storage means for storing a policy enforcement point (PEP) identifier corresponding to a
4 PEP in a first field of the data structure;
5 storage means for storing a group identifier corresponding to the group of endpoints in a
6 second field of the data structure in the memory wherein the group of endpoints being associated
7 with the PEP;
8 storage means for storing network utilization level information for the group, the network
9 utilization level information corresponding to a current amount of network resource consumption
10 by the group in a third field of the data structure wherein the data structure is stored in the
11 memory;
12 receiving means for receiving a message corresponding to a request for network
13 resources for a data flow for one endpoint of the group of endpoints;
14 accessing means for accessing said data structure based on information contained within
15 said message; and
16 response means for responding to said message based on information contained within
17 said data structure.

1 39. The system recited in claim 38 wherein the storage means for storing network utilization
2 level information further comprises:
3 storage means for storing a number of flow request attempts by the group occurring
4 during a time period in a fourth field of the data structure;
5 storage means for storing an amount of bandwidth currently in use by the group in a fifth
6 field of the data structure; and
7 storage means for storing a number of flows currently active for the group in a sixth field
8 of the data structure.

1 40. A computer program product embodied in a computer readable medium for performing a
2 method for controlling customer resources for network traffic delivery, the computer program
3 product comprising:

4 instructions for storing a policy enforcement point (PEP) identifier corresponding to a
5 policy enforcement point in a first field of a data structure;

6 instructions for storing a group identifier corresponding to the group of endpoints in a
7 second field of the data structure in the memory wherein the group of endpoints being associated
8 with the PEP;

9 instructions for storing predetermined network utilization limit information for the group
10 in a third field of the data structure wherein the data structure is stored in the memory;

11 instructions for communicating with a requestor and for receiving a message
12 corresponding to a request for network resources for a data flow for one endpoint of the group of
13 endpoints;

14 instructions for accessing said data structure based on information contained within said
15 message from the requestor; and

16 instructions for responding to said message based on information contained within said
17 data structure.

1 41. The computer program product recited in claim 40 wherein said instructions for storing
2 predetermined network utilization limit information for the group further comprise:

3 instructions for storing a limit for a number of flow request attempts by the group
4 occurring during a time period in a fourth field;

5 instructions for storing a limit for an amount of bandwidth currently in use by the group
6 in a fifth field; and

7 instructions for storing a limit for a number of flows currently active for the group in a
8 sixth field wherein the limit for a number of flow request attempts.

1 42. A computer program product embodied in a computer readable medium for performing a
2 method for controlling customer resources for network traffic delivery, the computer program
3 product comprising:

4 instructions for storing policy enforcement point (PEP) identifier corresponding to a PEP
5 in a first field of a data structure;

6 instructions for storing a group identifier corresponding to the group of endpoints in a
7 second field of the data structure in the memory wherein the group of endpoints being associated
8 with the PEP;

9 instructions for storing network utilization level information for the group, the network
10 utilization level information corresponding to a current amount of network resource consumption
11 by the group in a third field of the data structure wherein the data structure is stored in the
12 memory;

13 instructions for communicating with a requestor and for receiving a message
14 corresponding to a request for network resources for a data flow for one endpoint of the group of
15 endpoints;

16 instructions for accessing said data structure based on information contained within said
17 message; and

18 instructions for responding to said message based on information contained within said
19 data structure.

1 43. The computer program product recited in claim 42 wherein the instructions for storing
2 network utilization level information for the group further comprise:

3 instructions for storing a number of flow request attempts by the group occurring during a
4 time period in a fourth field of the data structure;

5 instructions for storing an amount of bandwidth currently in use by the group in a fifth
6 field of the data structure; and

7 instructions for storing a number of flows currently active for the group in a sixth field of
8 the data structure.